



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/008,439	12/06/2001	Harold J. Plourde JR.	60374.0040US01/A-7314	5248

62658 7590 01/22/2010
MERCHANT & GOULD
SCIENTIFIC ATLANTA, A CISCO COMPANY
P.O. BOX 2903
MINNEAPOLIS, MN 55402-0903

EXAMINER

CHOI, MICHAEL P

ART UNIT	PAPER NUMBER
----------	--------------

2621

MAIL DATE	DELIVERY MODE
-----------	---------------

01/22/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/008,439	Applicant(s) PLOURDE ET AL.	
	Examiner MICHAEL CHOI	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-24 and 26-49 is/are rejected.
- 7) ☒ Claim(s) 25 and 50 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 10/2/09 have been fully considered but they are not persuasive.

As per remarks on page 19, applicant argues that Ellis is an improper anticipatory reference since Ellis' filing date is subsequent to applicant's date. In response, Ellis, though such filing date is 2/21/02, such related US application data relies upon provisional applications dated 6/28/01, 6/7/01, 5/14/01, 4/18/01, 2/27/01 and 2/21/01 as parent application data which precedes applicant's date. Therefore, such prima facie rejection has been established.

As per remarks on pages 20 and 21, applicant argues that Ellis fails to teach "each of the media content instances in the buffer space as a respective management file. In response, Ellis does teach such limitation in Fig. 111, further clarified in that each program has specific attribute data corresponding to such program in program-related categories as listed when user selects documentary.

Claim Objections

1. Claims 25 and 50 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 102

Art Unit: 2621

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-7, 11-22, 26-32 and 35-47 are rejected under 35 U.S.C. 102(e) as being anticipated by Ellis et al. (US 2002/0174430 A1).

Regarding Claim 1, Ellis et al. teaches a media content recording system in a subscriber network television system, comprising:

- a memory for storing logic (Paragraph [0179]);
- a storage device comprising a buffer space for continuously buffering media content instances (in at least Figs. 9, 18, 19, 23, 25 and Paragraphs [0030-0033]), the buffer space comprising at any one instance of time plural media content instances corresponding to different video programs (in at least Figs. 94-113 and Paragraphs [0030-0033] – having storage for various programming); and
- a processor configured with the logic (Paragraphs [0475,0476]) to represent each of the media content instances in the buffer space as a respective management file stored in the memory (in at least Fig. 111, further clarified in that each program has specific attribute data corresponding to such program in program-related categories as listed when user selects documentary), the management file comprising a data structure that includes information identifying a corresponding media content instance of the media content instances (Fig. 111), the information including media guide schedule start and end times (in at least Figs. 11, 24, 34 – all programming having start and end times).

Regarding Claim 2, Ellis et al. teaches the system of claim 1, wherein the processor is further configured with the logic to represent the media content instance in the buffer space with the corresponding management file in the memory (Fig. 111), wherein the logic is further configured to track the duration of the buffered media content instance (Paragraphs [0039,0214,0215] – duration set in buffer).

Regarding Claim 3, Ellis et al. teaches the system of claim 2, wherein the duration of the media content instance corresponds to hard disk space (in Figures 18, 19, 113).

Regarding Claim 4, Ellis et al. teaches the system of claim 2, wherein the duration of the media content instance corresponds to a real-time playback duration (in at least Paragraphs [0028,0474]).

Regarding Claim 5, Ellis et al. teaches the system of claim 1, wherein the processor is further configured with the logic to receive media content information from a remote server (Paragraphs [0045,0157,0161,0174]), wherein the media content information comprises a scheduled media content instance start time and a scheduled media content instance end time (in at least Figs. 8, 11, 24, 34, 94, 97, 101 – wherein each program has a start and end time).

Regarding Claim 6, Ellis et al. teaches the system of claim 5, wherein the processor is further configured with the logic to track when the buffering of the media content instance starts (in at least Figs. 8, 11, 24, 34, 94, 97, 101).

Art Unit: 2621

Regarding Claim 7, Ellis et al. teaches the system of claim 5, wherein the processor is further configured with the logic to determine the media content instance duration by subtracting the media content instance buffering start time from the scheduled media content instance end time (Figs. 6, 8, 9, 10, 11, 24, 34, 94, 97, 101; Paragraphs [0039,0214,0215] – buffering before and after time with duration preset).

Regarding Claim 11, Ellis et al. teaches the system of claim 1, wherein the processor is further configured with the logic to use and store the scheduled stop time of a media content instance from media content instance guide data to determine when to close the management file for said ended media content instance and open a new management file for the next media content instance to be downloaded to the buffer space (in at least Figs. 5, 97, 110 and 111 - record program by time, wherein acknowledgement of start and end time is included).

Regarding Claim 12, Ellis et al. teaches the system of claim 1, wherein the processor is further configured with the logic to use the receipt time of a media content instance into the buffer space by using the start time as indicated by an internal clock (Paragraph [0021] – recording into buffer during present time; Fig. 15 – time listing when user chooses program at specified time).

Regarding Claim 13, Ellis et al. teaches the system of claim 1, wherein the processor is further configured with the logic to configure each of the media content instances as media content instance files, wherein the processor is further configured with the logic to identify each of the media content instance files by file names (Paragraphs [0159,0337,0378]; Figs. 7, 8, 11, 13, 14).

Regarding Claim 14, Ellis et al. teaches the system of claim 13, wherein the processor is further configured with the logic to randomly generate the file names of each of the media content instance files (in at least Fig. 5, 7, 8 – generating list as arbitrated by category and time).

Regarding Claim 15, Ellis et al. teaches the system of claim 13, wherein the processor is further configured with the logic to generate the media content instance file names using the media content instance guide data (in at least Figs. 7, 8, , 11, 13, 14).

Regarding Claim 16, Ellis et al. teaches the system of claim 15, wherein each of the media content instance file names include channel number, media content instance title, and the source of the media content instance. Ellis et al. teaches wherein each of the media content instance file names include channel number, media content instance title, and the source of the media content instance (in at least Figs. 7, 8, 11, 13, 15 – having channel number, title and source).

Regarding Claim 17, Ellis et al. teaches the system of claim 1, wherein the processor is further configured with the logic to buffer analog broadcast media content instances, received at a communications interface, as digitally compressed media content instances (Paragraphs [0004,0162,0163]).

Regarding Claim 18, Ellis et al. teaches the system of claim 1, wherein the processor is further configured with the logic to buffer an analog signal received at a connector from a

Art Unit: 2621

consumer electronics device, as a digitally compressed media content instance (Paragraphs [0004,0162-0164,251,474]).

Regarding Claim 19, Ellis et al. teaches the system of claim 1, wherein the processor is further configured with the logic to buffer digital broadcast media content instances, received at a communications interface, as digitally compressed media content instances (Paragraphs [0006,0162-0164,0251,0282,0474]).

Regarding Claim 20, Ellis et al. teaches the system of claim 1, wherein the processor is further configured with the logic to buffer digital media-on-demand media content instances, received at a communications interface from a remote server (Paragraphs [0012,0161,0425,0434]; Figs. 1-2), as digitally compressed media content instances (Paragraphs [0006,0162-0164,0251,0282,0474]).

Regarding Claim 21, Ellis et al. teaches the system of claim 1, wherein the processor is further configured with the logic to buffer digital media content instances, received at a digital communications port from a local network (Paragraphs [0012,0161,0425,0434]; Figs. 1-2), as digitally compressed media content instances (Paragraphs [0006,0162-0164,0251,0282,0474]).

Regarding Claim 22, Ellis et al. teaches the system of claim 1, wherein the processor is further configured with the logic to buffer digital media content instances, received at a digital communications port from a local device, as digitally compressed media content instances (in at least Paragraphs [0002,0006,0162-0164,0251,0282,0474]).

Regarding Claim 26, Ellis et al. teaches a media content recording method in a subscriber network television system, comprising the steps of:

- buffering media content instances into a buffer space, the buffer space comprising at any one instance of time plural media content instances (in at least Figs. 9, 18, 19, 23, 25 and Paragraphs [0030-0033]) corresponding to different video programs (in at least Figs. 94-113 and Paragraphs [0030-0033] – having storage for various programming); and
- representing each of the buffered media content instances as a management file in a memory separate from the buffer space (in at least Fig. 111).

Claim 27 is rejected under the same grounds as claim 2.

Claim 28 is rejected under the same grounds as claim 3.

Claim 29 is rejected under the same grounds as claim 4.

Claim 30 is rejected under the same grounds as claim 5.

Claim 31 is rejected under the same grounds as claim 6.

Claim 32 is rejected under the same grounds as claim 7.

Claim 36 is rejected under the same grounds as claim 11.

Claim 37 is rejected under the same grounds as claim 12.

Claim 38 is rejected under the same grounds as claim 13.

Claim 39 is rejected under the same grounds as claim 14.

Claim 40 is rejected under the same grounds as claim 15.

Claim 41 is rejected under the same grounds as claim 16.

Claim 42 is rejected under the same grounds as claim 17.

Claim 43 is rejected under the same grounds as claim 18.

Claim 44 is rejected under the same grounds as claim 19.

Claim 45 is rejected under the same grounds as claim 20.

Claim 46 is rejected under the same grounds as claim 21.

Claim 47 is rejected under the same grounds as claim 22.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 8-10, 23, 24, 33-35, 48 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis et al. (US 2002/0174430 A1) in view of Kaneko (US 6,625,811 B1).

Regarding Claim 8, Ellis et al. teaches the system of claim 1, wherein the processor is further configured with the logic to configure the data structure to include media content instance guide data (in at least Figs. 5, 7, 11), a buffering start time (in at least Figs. 8, 11, 24, 34, 94, 97, 101), an active playback location within the media content instance in the buffer space (Figs. 94, 97, 101), a status flag (Fig. 65; Paragraphs [0034,0040,0372]), and a media content instance file name (Figs. 7, 11, 13; Paragraphs [0337,0378]). Ellis et al. fails to explicitly teach a status flag. Kaneko teaches a status flag (Figs. 7 and 8).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have a status flag enabling such device to check whether a program has been reproduced, outputted, etc. by indicated bit so as to not replay or resend a program saving bandwidth allocation and time.

Regarding Claim 9, Ellis et al. teaches the system of claim 1, wherein the processor is further configured with the logic but fails to explicitly teach to organize a plurality of management files as a linked list of the management files comprising the locations of data for said files and

Art Unit: 2621

locations to a previously created management file and to a subsequently created management file. Kaneko teaches to organize a plurality of management files as a linked list of the management files comprising the locations of data for said files and locations to a previously created management file and to a subsequently created management file (in at least Figs. 6-8).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have a status flag and management tables linked, thereby enabling such device to check from various sources whether a program has been reproduced, outputted, etc. by indicated bit so as to not replay or resend a program saving bandwidth allocation and time.

Regarding Claim 10, Ellis et al. teaches the system of claim 1, wherein the processor is further configured with the logic but fails to explicitly teach to organize a plurality of management files as a linked list of pointers to the management files (Figs. 6-8; Col. 8, lines 46-65).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have pointers within management tables linked, thereby enabling such device to check from various sources whether a program has been reproduced, from which point, outputted, etc. by indicated bit so as to not replay or resend a program saving bandwidth allocation and time.

Claim 33 is rejected under the same grounds as claim 8.

Claim 34 is rejected under the same grounds as claim 9.

Claim 35 is rejected under the same grounds as claim 10.

Regarding Claim 23, Ellis et al. teaches the system of claim 1, but fails to explicitly teach wherein the processor is further configured with the logic to maintain a status flag in the management file wherein the status flag is configured as temporary for a buffered media content

Art Unit: 2621

instance that is not designated for permanent recording. Kaneko teaches wherein the processor is further configured with the logic to maintain a status flag in the management file wherein the status flag is configured as temporary for a buffered media content instance that is not designated for permanent recording (Col. 9, lines 46-60; Col. 13, lines 20-34 – flag storage in buffer, having temporary nature).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have such transient file managers for smooth playback when device acknowledges clear destination of allocation with buffering capacity without the need of taking up space.

Regarding Claim 24, Ellis et al. teaches the system of claim 23, wherein the processor is further configured with the logic to cause the permanently recorded media content instance to have a permanent designation in a file allocation table (in at least Figs. 94,97,101,113 – start when tuned to channel; Paragraphs [0034, 0337,0378]) *but fails to explicitly teach* wherein the processor is further configured with the logic to configure the status flag of the management file for a buffered media content instance as permanent when the user requests that said media content instance be permanently recorded, wherein the processor is further configured with the logic to cause the permanently recorded media content instance to have a permanent designation in a file allocation table in response to having status flag of the corresponding management file configured as permanent, such that the buffer space storing the permanently recorded media content instance becomes designated as non-buffer space.

Kaneko teaches teach to configure the status flag of the management file for a buffered media content instance as permanent when the user requests that said media content instance be permanently recorded, in response to having status flag of the corresponding management file configured as permanent, such that the buffer space storing the permanently recorded

Art Unit: 2621

media content instance becomes designated as non-buffer space (Col. 8, lines 46-65; Col. 10, lines 24-27 – recording in storage unit until otherwise deleted).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have such permanent file for facilitated recovery without a need for a new table or file thereby allowing faster processing in playback buffering capacity.

Claim 48 is rejected under the same grounds as claim 23.

Claim 49 is rejected under the same grounds as claim 24.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL CHOI whose telephone number is (571) 272-9594. The examiner can normally be reached on M-F (9am - 5:30pm).

Art Unit: 2621

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michael Choi
Examiner
Art Unit 2621

/Thai Tran/
Supervisory Patent Examiner, Art Unit 2621